Preliminary Classification:

**Proposed Class:** 

Subclass:

NOTE:

"All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129." M.P.E.P. § 601, 7th ed.

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### **NEW APPLICATION TRANSMITTAL**

Transmitted herewith for filing is the patent application of

Susumu Takagi Inventor(s):

WARNING: 37 C.F.R.§ 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(I) is filed supplying or changing the name or

names of the inventor or inventors."

For (title): VARIABLE GAIN AMPLIFIER

### **CERTIFICATION UNDER 37 C.F.R. § 1.10\***

(Express Mail label number is mandatory) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date, DEC. 12, 2003, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number \_\_\_\_\_\_Eventhe Commissioner for Patents, PO Box 1450, Alexandria VA 22313-1450. EV 303 713 595 US addressed to

Dorothy Tomasco

(type or print name of person mailing paper)

of person mailing paper

Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 **WARNING:** cannot be used to obtain a date of mailing or transmission for this correspondence.

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail"

mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed.

Reg. 56,439, at 56,442.

**WARNING:** 

# 

WARNING: "Do no

"Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 37(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.

WARNING: Do not use this transmittal for the filing of a provisional application.

NOTE: If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.

Divisional
Continuation
Continuation-in-part (C-I-P)

## 2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designated the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120,121 or 365(c). (35 U.S.C. §§ 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 199, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

WARNING:		G:	When the last day of pendency of a provisional application falls on a Saturday, Sunday, of Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application <b>must</b> be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).
			The new application being transmitted claims the benefit of prior U.S application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S CLAIMED.
3.	Par	pers	Enclosed
	<u>27</u> 5	1.1: _ Pa _ Pa	uired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 3 (Design) Application ges of specification ges of claims ets of drawings
	WARNI		G: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standard according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments of proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).
	NO	TE:	"Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. The information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm (5/8 inch) down from the top of the page " 37 C.F.R. § 1.84(c)).
			(complete the following, if applicable)
			The enclosed drawing(s) are photograph(s), and there is also attached "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 3 C.F.R. § 1.84(b).
			The enclosed drawing(s) are in color. Three (3) sets of color drawing and a "PETITION TO ACCEPT COLOR DRAWING(S)" are attached. 3 C.F.R. §§ 1.84(a)(2) and 1.84(b).
		×	formal informal
	В.	Oth	er Papers Enclosed
		_ Pa	ges of declaration and power of attorney ges of abstract ner
4.	Ad	ditio	nal papers enclosed
•••			endment to claims
		the	ncel in this application claims before calculating filing fee. (At least one original independent claim must be retained for g purposes.)
		bee	I the claims shown on the attached amendment. (Claims added have n numbered consecutively following the highest numbered original ms.)

	X	Pre	iminary Amendment			
	×	Info	rmation Disclosure Statement (37 C.F.R. § 1.98)			
	X	For	n PTO-1449 (PTO/SB/08A and 08B)			
	X	Cita	tions			
		Dec	laration of Biological Deposit			
		am	mission of "Sequence Listing," computer readable copy and/orendment pertaining thereto for biotechnology invention containing teotide and/or amino acid sequence			
			norization of Attorney(s) to Accept and Follow Instructions from resentative			
		Spe	cial Comments			
		Oth	er			
5.	Dec	clars	tion or oath (including power of attorney)			
NO	TE:	that bein matt appi copy are unde deci in a	why executed declaration is not required in a continuation or divisional application provided the prior nonprovisional application contained a declaration as required, the application of filed is by all or fewer than all the inventors named in the prior application, there is no new are in the application being filed, and a copy of the executed declaration filed in the prior cation (showing the signature or an indication thereon that it was signed) is submitted. The must be accompanied by a statement requesting deletion of the names of person(s) who to inventors of the application being filed. If the declaration in the prior application was filed in § 1.47, then a copy of that declaration must be filed accompanied by a copy of the sion granting § 1.47 status or, if a nonsigning person under § 1.47 has subsequently joined prior application, then a copy of the subsequently executed declaration must be filed. See F.R. §§ 1.63(d)(1)-(3).			
NO	TE:	A declaration filed to complete an application must be executed, identify the specification which it is directed, identify each inventor by full name including family name and at least of given name, without abbreviation together with any other given name or initial, and residence, post office address and country or citizenship of each inventor, and state whether inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)-(4).				
NO	TE:	deciloath appi to § is fil	inventorship of a nonprovisional application is that inventorship set forth in the oath of aration as prescribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional cation, the inventorship is that inventorship set forth in the application papers filed pursuant 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(l) and supplying or changing the name or names of the inventor or inventors." 37 C.F.R. § (a)(1).			
		X	Enclosed			
			Executed by			
			(check all applicable boxes)			
			☑ inventor(s).			
			☐ legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.			
			☐ joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.			
			☐ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F. R. § 1.47 is also attached. See item 13 below for fee.			
			Not Enclosed			

5.

NO	TE:	com Appi may	pletion lication be. u	n of the U.S. n, the applicat	application on may be tre D PAGE FOR	contains s eated as a R NEW AP	subject ma continuatio	emational Application tter in addition to the in or continuation-in-pa N TRANSMITTAL WHE	International rt, as the case
				Application on behalf o	is made by f <i>all</i> the abo	a perso ove name	n authori ed invent	zed under 37 C.F.I or(s).	R. § 1.41(c)
(	The	dec	larati	on or oath,	along with		harge red bsequent	uired by 37 C.F.R. ly).	§ 1.16(e) can be
					Showing t (not requir			thorized. into question. 37 C	.F.R. § 1.41(d))
6.	Inv	ento	orshi	p Stateme	nt				
WA	RNIN	IG:	the o	named inven wnership of th ubmitted.	tors are each e various clai	not the inv ms at the t	rentors of a ime the las	ll the claims an explana t claimed invention was	ation, including made, should
The	e inv	ento	rship	for all the	claims in th	is applic	ation is:		
	×	The	e san	ne.					
						or			
				same. An e				nership of the vario	ous claims
			is sı	ubmitted.					
			will	be submitte	d				
7.	Laı	ngua	age						
NO	TE:	Eng of \$	lish. 130.0	An English tra	nslation of the 37 C.F.R. § 1	e non-Engl I.17(k) is n	lish langua equired to	ny be filed in a langua ge application and the p be filed with the applica	processing fee
		× □		English Non Englis	h				
			_	The attache accurate. 3			les a stat	ement that the tran	islation is
8.	As	sign	men	t					
		X	An a	assignment	of the inve	ntion to _		New Japan Radio	Co., Ltd.
			_		NT) ACĊO	MPANYI	ING NEV	SHEET FOR AS: V PATENT APPLIC	
			X	will follow.					
NO	TE:							end two separate lette 990 (1114 O.G. 77-78).	

VVARIVII	vG.	continuation 62-64.	i-in-part appl	ication is filed by	an ass	ignee. Notice	of April 30,	1993, 1150 OG	
				divisional app					
						Reel_			
							e		
9. Ce	rtifie	d Copy							
Се	rtifie	d copy(ies	) of applica	ation(s)					
JA	PAN			2002		66		12 DEC. 20	02
Co	untry	,		Applr	ı. No.			Filed	j
JAI	PAN			2003-0	<u> 58070</u>			5 MAR. 2003	
Co	untry	,		Applr	n. No.			Filed	ţ
from w	hich	priority is	claimed:						
	×		tached. (v	vith certified E	nglish	language t	ranslation	thereof)	
	or de This pare unde item OF I	eclaration. 3: item is for int U.S. apper 35 U.S.C. 18 on the interpretace in the inte	7 C.F.R. § 1.5 any foreign p lication or In § 120 is itse ADDED PAG	•	the app cation to ity from	olication being from which thi o a prior foreig	filed directly is application n application	relates. If any claims benefit then complete	, !
——————————————————————————————————————		Regu	аг арриса			···			
				CLAIMS AS	FILE	)			
Numbe	er file	d		Number Extra	<b>a</b>	Rate		Basic Fee R. § 1.16(a) \$770.00	
Total C (37 C.F	-	s § 1.16(c))	5 - 20 =	0	×	\$18.00 =		0.00	
		t Claims § 1.16(b))	4 - 3 =	1	×	\$84.00 =		84.00	
		endent cl c.F.R. § 1.			+	\$280.00			
NOTE:		Amendm Fee for e	ent deletin xtra claims	ing extra claim g multiple-dep s is not being p	ender aid at	ncies is enc t this time.		ms cancalad b	,
WOIE.	ame	ndment, pri	or to the ex	re not paid on fili piration of the ti e of fee deficiency	me pei	riod set for re	esponse by		
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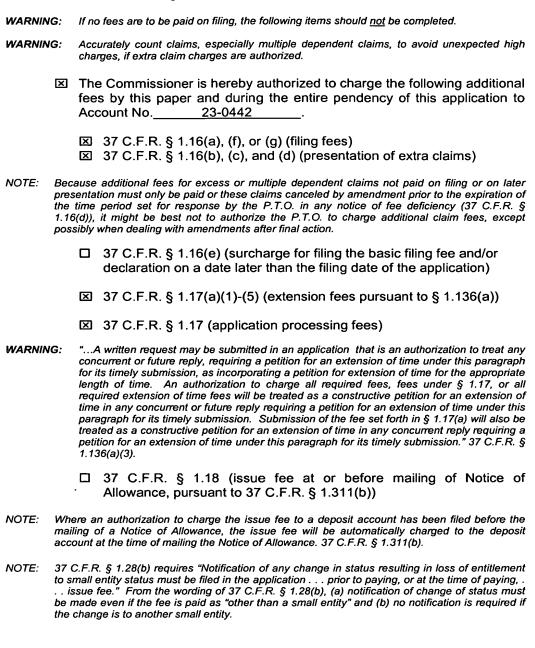
(New Application Transmittal [4-1] page 6 of 11)

(	В.		Design application (\$310.00 – 37 C.F.R. § 1.16(f))
			Filing Fee Calculation \$
(	C.		Plant application
			(\$480.00 - 37 C.F.R. § 1.16(g))
			Filing Fee Calculation \$
11. Sma	II E	ntit	y Statement(s)
			ent(s) that this is a filing by a small entity under 37 C.F.R. §§ 1.9 and are) attached.
WARNING	<b>:</b> :	whice pater which has divised 1.53 entite application the first desired.	us as a small entity must be specifically established in each application or patent in the status is available and desired. Status as a small entity in one application or not does not affect any other application or patent, including applications or patents in are directly or indirectly dependent upon the application or patent in which the status been established. The refiling of an application under § 1.53 as a continuation, or, or continuation-in-part (including a continued prosecution application under § 1.64), or the filing of a reissue application requires a new determination as to continued ement to small entity status for the continuing or reissue application. A nonprovisional cation claiming benefit under 35 U.S.C. § 119(e), 120, 121, or 365(c) of a prior cation, or a reissue application may rely on a statement filed in the prior application or application or the reissue application includes a reference a statement in the prior application or in the patent or includes a copy of the statement be prior application or in the patent and status as a small entity is still proper and the payment of the small entity basic statutory filing fee will be treated as such a tence for purposes of this section." 37 C.F.R. § 1.28(a)(2).
WARNING	<b>:</b> :	state	all entity status must not be established when the person or persons signing the ment can <b>unequivocally</b> make the required self-certification." M.P.E.P., § 509.03, 6 <sup>th</sup> rev. 2, July 1996 (emphasis added).
			(complete the following, if applicable)
			Status as a small entity was claimed in prior application
·			
			35 U.S.C. § □ 119(e), □ 120, □ 121, □ 365(c), and which status as a small entity is still proper and desired.
			□ A copy of the statement in the prior application is included.
			Filing Fee Calculation (50% of A, B, or C above)
			\$
NOTE:	aı	e file	cess of the full fee paid will be refunded if a small entity statement and a refund request d within 2 months of the date of timely payment of a full fee. The two-month period is endable under § 1.136. 37 C.F.R. § 1.28(a).
12. Req	ues	st fo	r International-Type Search (37 C.F.R. § 1.104(d))
			(complete, if applicable)
			prepare an international-type search report for this application at the en national examination on the merits takes place.

13. Fe	e Pa	yment Being Made at This Time	
	No	t Enclosed	
		No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.16(e) ca subsequently.)	n be paid
×	En	closed	
	$\boxtimes$	Filing fee	\$ <u>854.00</u>
		Recording assignment (\$40.00 – 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION.")	\$
		Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached.  (\$130.00 - 37 C.F.R. §§ 1.47 and 1.17(i))	\$
		For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$
		Processing and retention fee (\$130.00, 37 C.F.R. §§ 1.52(d) and 1.21(I))	\$
		Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))	\$
NOTE:	aba as t a pi	C.F.R. § 1.21(I) establishes a fee for processing and retaining any and and an analysis indoned for failing to complete the application pursuant to 37 C.F.R. § 1.53 the changes to 37 C.F.R. §§ 1.53 and 1.78(a)(1), indicate that in order to order U.S. application, either the basic filing fee must be paid, or the process of § 1.21(I) must be paid, within 1 year from the notification under § 53(f).	f) and this, as well btain the benefit of
	То	tal fees enclosed	\$854.00
14. Me	tho	d of Payment of Fees	
$\boxtimes$	Att	ached is a ⊠ check □ money order in the amount of \$	854.00
	Au	thorization if hereby made to charge the amount of \$	
		to Deposit Account No.	
		to credit card as shown on the attached credit card info authorization form PTO-2038	ormation
□ in		arge any additional fees required by this paper or credit any manner authorized above. A duplicate of this transmittal is	
NOTE:		s should be itemized in such a manner that it is clear for which purpose the R. § 1.22(b).	e fees are paid. 37

(New Application Transmittal [4-1] page 8 of 11)

### 15. Authorization to Charge Additional Fees



## 16. Instructions as to Overpayment

Customer No. 004955

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NOTE:	a re	easonable time, nor will the paye ars may be returned by check or,	will not be returned unless specifically requested be notified of such amounts; amounts over twer requested, by credit to a deposit account." 37 C.	ty-five
	X	Credit Account No	23-0442	
		Refund		
Date: 1		EC. 2003 28,333	Milton M. SIGNATURE OF PRACTITION	
Tel. No	. (20	93) 261-1234	Milton M. Oliver (type or print name of practitions)	- er
			Ware, Fressola, Van Der Sluys & Adolphson, LLP P.O. (Correspondence) Address	_

(New Application Transmittal [4-1] page 10 of 11)

Building Five, Bradford Green 755 Main Street, P.O. Box 224

Monroe, CT 06468

	Inc	orporation by r ference of added pages
	pric sta the	eck the following item if the application in this transmittal claims the benefit of or U.S. application(s) (including an international application entering the U.S. ge as a continuation, divisional or C-I-P application) and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE NEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.)
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed  Number of pages added
		Plus Added Pages for Papers Referred to in Item 4 Above
		Number of pages added
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.
		Number of pages added
		Plus "Assignment Cover Letter Accompanying New Application"
		Number of pages added
×	Sta	tement Where No Further Pages Added
		(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item.
	X	This transmittal ends with this page.